

REMARKS

Claims 1-35 are pending. In view of the following, all of the claims are in condition for allowance. If, after considering this response, the Examiner does not agree that all of the claims are allowable, she is requested to schedule a teleconference with the Applicant's attorney to further the prosecution of the application.

Rejection of claims 1-2, 20, 23 and 29-30 under §102(b) as being anticipated by Brown et al. (US 4,920,434)

Claim 1

Claim 1 recites a servo circuit, comprising a servo channel operable to recover servo data from servo wedges that identify respective data sectors on a data-storage disk, and a processor coupled to the servo channel and operable to detect a first spin-up wedge associated with the first one of the servo wedges and then to detect the first servo wedge while the disk is attaining or after the disk attains an operating speed and before the servo channel recovers any servo data from any other servo wedge.

For example, referring, e.g., to FIGS. 4, 6, 15 and 16 and paragraphs 30, 39, 41-60, 62 and 74-77 of the present application, a spin-up wedge 152 is associated with a servo wedge 154, which includes a preamble 74, a servo synchronization mark (SSM) 76, a head-location identifier 78, and bursts 84a-84n. On spin up of the disk, a servo circuit 30 exploits the properties of the spin-up wedge 152 (for example, consecutive logic 0's) to detect the spin-up wedge, and then exploits the properties of a sinusoid to detect the preamble 74 of the servo wedge 154. Then, the circuit 30 searches for the SSM 76 within a predetermined time window, and then recovers the location identifier 78 which a head-position circuit 214 uses to determine an initial position of a read-write head 32. Detecting both the spin-up wedge 152 and the servo wedge 154 on disk spin up is a more robust technique for determining the head position on disk spin up than merely detecting the spin-up wedge or the servo wedge, but not both.

Brown et al., on the other hand, does not disclose a processor operable to detect a spin-up wedge associated with a servo wedge and then to detect the servo wedge

while the disk is attaining or after the disk attains an operating speed and before the servo channel recovers any servo data from any other servo wedge. In fact, Brown et al. does not disclose any servo wedges whatsoever. Instead, Brown et al. simply discloses a hard disk memory system 10 having a transducer 24 that calibrates a position of a head 30 over a magnetic disk 14. The quoted passage (Col. 10, Lines 12-34) relied upon by the Examiner in rejecting claim 1 discloses an initialization mode, where a microprocessor 76 moves the head 30 to the outermost track of the disk 14; the transducer 24 indicates to the microprocessor when the head is over the outermost track. However, the transducer 24 is simply a sensor that is external to the disk 14, and has nothing to do with spin-up wedges or servo wedges, which are located on a disk. After reviewing Brown et al. in its entirety, Applicants' attorney is unable find any mention of spin-up wedges. Therefore, claim 1 is not anticipated by Brown et al.

Claims 20, 23 and 29-30

Claims 20, 23 and 29-30 are patentable for reasons similar to those recited above in support of the patentability of claim 1.

Claim 2

Claim 2 is patentable by virtue of its dependency from independent claim 1.

Rejection of claims 4, 6-7 and 31 under 103(a) as being unpatentable over Brown et al. in view of Tuttle et al. (US 6,108,151)

Claims 4, 6-7 and 31 are patentable by virtue of their respective dependencies from independent claims 1 and 30.

Rejection of claims 3, 5, 9-17, 21-22, 24-28 and 32-35 under 103(a) as being unpatentable over Brown et al. and Tuttle et al., and further in view of Leis et al. (US 5,036,408)

Claims 3, 5, 9-17, 21-22, 24-28 and 32-35 are patentable by virtue of their respective dependencies from independent claims 1, 20, 23 and 30.

Rejection of claim 19 under 103(a) as being unpatentable over Brown et al. and Tuttle et al., and further in view of Patapoutian et al. (US 5,661,760)

Claim 19 is patentable by virtue of its dependency from independent claim 1.

CONCLUSION

In light of the foregoing remarks, claims 1-35 are in condition for allowance, which is respectfully requested.

In the event additional fees are due as a result of this amendment, you are hereby authorized to charge such payment to Deposit Account No. 07-1897.

If, after considering this response, the Examiner does not agree that all of the claims are allowable, then it is respectfully requested that the Examiner contact the Applicants' attorney, Bryan Santarelli, at (425) 455-5575.

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Respectfully submitted,

GRAYBEAL JACKSON HALEY LLP



Bryan A. Santarelli
Attorney for Applicants
Registration No. 37,560
155-108th Avenue N.E., Ste 350
Bellevue, WA 98004-5973
(425) 455-5575